Evolution of Hormone-Receptor Systems

Edited by R.A. Bradshaw and G.N. Gill

Alan R. Liss; New York, 1983
xxi + 503 pages. £67.00

This work is the report of a meeting held in March 1982 and is in fact volume 6 of the UCLA Symposia on Molecular and Cellular Biology, New Series, under the general editorship of C. Fred Fox. I was excited by the title of the book, although this excitement was tempered by the list of contents, much of which looked familiar.

The familiarity was not imagined. Of the 48 contributions, 31 have already been published in volumes 19, 20 and 21 of the Journal of Cellular Biochemistry, and the reader is advised that 'the Journal is the only appropriate literature citation for the articles'. Not only does this republication detract from the value of the book, but it adds considerable confusion as pages are double numbered to represent the order in the book (which is used for indexing purposes) and the page number in the Journal (which is used in citations at the end of each article). Eventually, I discovered the simplest way to find a cited article was to refer to the list of contributors! Of the 17 'original' articles, 8 were found to be workshop reports which in general gave sufficient information to entice the reader into wanting to know more. In some instances hopes were raised by reference to another chapter only for these hopes to be dashed by the realisation (eventually) that the paper was not simply trapped in the indexing system but had not been published.

The contents are a collection of research papers with some useful reviews. The major part comprises papers on polypeptide hormones and growth factors which are grouped on the contents page, but not in the text, into 7 areas including receptor antibodies, receptor kinase activity, internalization, and mechanism and response. EGF and NGF were the predominant ligands discussed with a scattering of papers on others such as insulin. I was disappointed that there was not more on insulin or the adrenergic system, both of which are well studied, but most of the major groups working on these ligands were not represented.

The rest of the book is mainly concerned with steroids. I found this area to be less diverse and more coherent, despite again being spread throughout the book. It contains two good reviews and two of the more informative workshop reports along with the basic research papers.

I was in general disappointed with this book despite the quality of some of the individual contributions. This was in part because of the republication and the fragmented nature, but mainly because my expectations based on the title were not fulfilled. Evolution appeared only twice – in a workshop report and in a paper on neurotransmitter receptors. It may have been the intention to show the evolution of our understanding, but if so this reader did not receive the appropriate signals.

K.R.F. Elliott